

SEQUENCE LISTING

<110> Miller, Jeffrey A.

<120> ASSAYS AND PEPTIDE SUBSTRATE FOR DETERMINING AGGRECAN DEGRADING METALLO PROTEASE ACTIVITY

<130> DM6907A

<140> 09/975,813

<141> 2001-09-12

<150> 60/053,850

<151> 1997-07-25

<160> 61

<170> PatentIn version 3.2

<210> 1

<211> 40

<212> PRT

<213> Homo Sapiens

<400> 1

Gln Thr Val Thr Trp Pro Asp Met Glu Leu Pro Leu Pro Arg Asn Ile

5 10 15

Thr Glu Gly Glu Ala Arg Gly Ser Val Ile Leu Thr Val Lys Pro Ile 20 25 30

Phe Glu Val Ser Pro Ser Pro Leu 35 40

<210> 2

<211> 41

<212> PRT

<213> Bovine

<400> 2

Gln Thr Val Thr Trp Pro Asp Val Glu Leu Pro Leu Pro Arg Asn Ile
1 10 15

Thr Glu Gly Glu Ala Arg Gly Ser Val Ile Leu Thr Ala Lys Pro Asp 20 25 30

Phe Glu Val Ser Pro Thr Ala Pro Glu

```
<210> 3
<211> 40
<212> PRT
```

<213> Homo Sapiens

<400> 3

Lys Glu Glu Gly Leu Gly Ser Val Glu Leu Ser Gly Leu Pro Ser 20 25 30

Gly Glu Leu Gly Val Ser Gly Thr 35 40

<210> 4

<211> 41

<212> PRT

<213> Artificial

<220>

<223> synthetic

<220>

<221> MISC_FEATURE

<222> (41)..(41)

<223> biotinylated lysine residue

<400> 4

Gln Thr Val Thr Trp Pro Asp Met Glu Leu Pro Leu Pro Arg Asn Ile $1 \ \ \, 5 \ \ \, 10 \ \ \, 15$

Thr Glu Gly Glu Ala Arg Gly Ser Val Ile Leu Thr Val Lys Pro Ile
20 25 30

Phe Glu Val Ser Pro Ser Pro Leu Lys 35 40

<210> 5

<211> 21

<212> PRT

<213> Artificial

<220>

<223> synthetic

<220>

```
<221> MISC_FEATURE
<222> (21)..(21)
<223> biotinylated lysine residue
<400> 5
Ala Arg Gly Ser Val Ile Leu Thr Val Lys Pro Ile Phe Glu Val Ser
                                   10
Pro Ser Pro Leu Lys
           20
<210> 6
<211> 21
<212> PRT
<213> Artificial
<220>
<223> synthetic
<220>
<221> MISC_FEATURE
<222>
      (1)..(1)
<223> biotinylated lysine residue
<400> 6
Lys Gln Thr Val Thr Trp Pro Asp Met Glu Leu Pro Leu Pro Arg Asn
                                                        15
Ile Thr Glu Gly Glu
           20
<210> 7
<211> 30
<212> PRT
<213> Artificial
<220>
<223> synthetic
<220>
<221> MISC FEATURE
<222>
      (30)..(30)
<223> biotinylated lysine residue
<400> 7
Gln Thr Val Thr Trp Pro Asp Met Glu Leu Pro Leu Pro Arg Asn Ile
1
               5
```

```
<210> 8
<211> 6
<212> PRT
<213> Homo sapiens
<400> 8
Asn Ile Thr Glu Gly Glu
<210> 9
<211> 8
<212> PRT
<213> Homo sapiens
<400> 9
Ala Arg Gly Ser Val Ile Leu Thr
<210> 10
<211> 6
<212> PRT
<213> Bovine
<400> 10
Asn Ile Thr Glu Gly Glu
<210> 11
<211> 8
<212> PRT
<213> Bovine
<400> 11
Ala Arg Gly Ser Val Ile Leu Thr
               5
<210> 12
<211> 6
<212> PRT
<213> Rat
<400> 12
```

Thr Glu Gly Gln Ala Arg Gly Ser Val Ile Leu Thr Val Lys

20

Asn Ile Thr Glu Gly Glu

25

```
1 5
```

```
<210> 13
```

<400> 13

Ala Arg Gly Asn Val Ile Leu Thr 1 5

<210> 14

<211> 6

<212> PRT

<213> Mouse

<400> 14

Asn Val Thr Glu Gly Glu 1 5

<210> 15

<211> 8

<212> PRT

<213> Mouse

<400> 15

Ala Leu Gly Ser Val Ile Leu Thr 1 5

<210> 16

<211> 6

<212> PRT

<213> Pig

<400> 1.6

Asn Ile Thr Glu Gly Glu 1 5

<210> 17

<211> 8

<212> PRT

<213>. Pig

<400> 17

Ala Arg Gly Thr Val Ile Leu Thr 1 5

```
<210> 18
<211> 6
<212> PRT
<213> Sheep
<400> 18
Asn Ile Thr Glu Gly Glu
1 . 5
<210> 19
<211> 8
<212> PRT
<213> Sheep
<400> 19
Ala Arg Gly Asn Val Ile Leu Thr
      5
<210> 20
<211> 6
<212> PRT
<213> Chicken
<400> 20
Asn Val Thr Glu Glu Glu
<210> 21
<211> 5
<212> PRT
<213> Chicken
<400> 21
Ala Arg Gly Ser Ile
<210> 22
<211> 6
<212> PRT
<213> Horse
<400> 22
Asn Ile Thr Glu Gly Glu
```

5

<210> 23

```
<211> 8
```

<212> PRT

<213> Horse

<400> 23

Ala Arg Gly Asn Val Ile Leu Thr 1 5

<210> 24

<211> 8

<212> PRT

<213> Homo Sapiens

<400> 24

Ala Ser Thr Ala Ser Glu Leu Glu 1 5

<210> 25

<211> 8

<212> PRT

<213> Homo Sapiens

<400> 25

Gly Arg Gly Thr Ile Gly Ile Ser 1 5

<210> 26

<211> 8

<212> PRT

<213> Bovine

<400> 26

Ala Thr Thr Ala Gly Glu Leu Glu 1

<210> 27

<211> 8

<212> PRT

<213> Bovine

<400> 27

Gly Arg Gly Thr Ile Asp Ile Ser 1 5

<210> 28

<211> 8

<212> PRT

```
<213> Mouse
<400> 28
Ala Thr Thr Ser Ser Glu Leu Glu
              5
<210> 29
<211> 8
<212> PRT
<213> Mouse
<400> 29
Gly Arg Gly Thr Ile Gly Ile Ser
               5
1
<210> 30
<211> 8
<212> PRT
<213> Rat
<400> 30
Ala Thr Thr Ala Ser Glu Leu Glu
               5
<210> 31
<211> 8
<212> PRT
<213> Rat
<400> 31
Gly Arg Gly Thr Ile Ser Val Ser
<210> 32
<211> 8
<212> PRT
<213> Homo Sapiens
<400> 32
Pro Thr Thr Phe Lys Glu Glu Glu
1 . 5
<210> 33
<211>
     8
<212> PRT
```

<213> Homo Sapiens

```
<400> 33
Gly Leu Gly Ser Val Glu Leu Ser
              5
<210> 34
<211> 8
<212> PRT
<213> Bovine
<400> 34
Pro Thr Thr Phe Lys Glu Glu Glu
              5
<210> 35
<211> 8
<212> PRT
<213> Bovine
<400> 35
Gly Leu Gly Ser Val Glu Leu Ser
1 5
<210> 36
<211> 8
<212> PRT
<213> Rat
<400> 36
Pro Thr Thr Phe Arg Glu Glu Glu
<210> 37
<211> 8
<212> PRT
<213> Rat
<400> 37
Gly Leu Gly Ser Val Glu Leu Ser
<210> 38
<211> 8
<212> PRT
<213> Mouse
```

<400> 38

```
Pro Thr Thr Phe Arg Glu Glu Glu
<210> 39
<211> 8
<212> PRT
<213> Mouse
<400> 39
Gly Leu Gly Ser Val Glu Leu Ser
1 5
<210> 40
<211> 8
<212> PRT
<213> Homo Sapiens
<400> 40
Thr Gln Ala Pro Thr Ala Gln Glu
   · 5
<210> 41
<211> 8
<212> PRT
<213> Homo Sapiens
<400> 41
Ala Gly Glu Gly Pro Ser Gly Ile
           5
<210> 42
<211> 8
<212> PRT
<213> Bovine
<400> 42
Thr Gln Ala Pro Thr Ala Gln Glu
<210> 43
<211> 8
<212> PRT
<213> Bovine
<400> 43
Ala Gly Glu Gly Pro Ser Gly Ile
```

```
<210> 44
<211> 8
<212> PRT
<213> Rat
<400> 44
Thr Leu Ala Pro Thr Ala Gln Glu
               5
<210> 45
<211> 8
<212> PRT
<213> Rat
<400> 45
Ala Gly Glu Gly Pro Ser Ser Ile
               5
<210> 46
<211> 8
<212> PRT
<213> Mouse
<400> 46
Thr Gln Ala Pro Thr Ala Gln Glu
<210> 47
<211> 8
<212> PRT
<213> Mouse
<400> 47
Ala Gly Glu Gly Pro Ser Gly Ile
<210> 48
<211> 8
<212> PRT
<213> Chicken
<400> 48
Thr Gln Thr Ser Val Ala Gln Glu
               5
```

```
<210> 49
<211> 8
<212> PRT
<213> Chicken
<400> 49
Val Gly Glu Gly Pro Ser Gly Met
<210> 50
<211> 8
<212> PRT
<213> Homo Sapiens
<400> 50
Thr Glu Pro Thr Ile Ser Gln Glu
               5
<210> 51
<211> 8
<212> PRT
<213> Homo Sapiens
<400> 51
Leu Gly Gln Arg Pro Pro Val Thr
<210> 52
<211> 8
<212> PRT
<213> Bovine
<400> 52
Thr Glu Pro Thr Val Ser Gln Glu
               5
<210> 53
<211> 8
<212> PRT
<213> Bovine
<400> 53
Leu Gly Gln Arg Pro Pro Val Thr
```

<210> 54 <211> 8

```
<212> PRT
<213> Rat
<400> 54
Thr Glu Pro Thr Val Ser Gln Glu
               5
<210> 55
<211> 8
<212> PRT
<213> Rat
<400> 55
Leu Gly His Gly Pro Ser Met Thr
               5
<210> 56
<211> 8
<212> PRT
<213> Mouse
<400> 56
Thr Glu Pro Thr Val Ser Gln Glu
               5
<210> 57
<211> 8
<212> PRT
<213> Mouse
<400> 57
Leu Gly His Gly Pro Ser Met Thr
              5
<210> 58
<211> 8
<212> PRT
<213> Chicken
<400> 58
Thr Arg Pro Thr Val Ser Gln Glu
               5
<210> 59
<211> 8
```

<212> PRT <213> Chicken

```
<400> 59
```

Leu Gly Gly Glu Thr Ala Val Thr 1

<210> 60

<211> 8

<212> PRT

<213> Dog

<400> 60

Thr Glu Pro Thr Val Ser Gln Glu 1 5

<210> 61

<211> 8

<212> PRT

<213> Dog

<400> 61

Leu Gly Gly Glu Thr Ala Val Thr 1 5